

**ANTENNA STRUCTURE WITH INTEGRAL IMPEDANCE SWITCH  
MECHANISM**

**ABSTRACT OF THE DISCLOSURE**

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An antenna structure (142) having a retractable element (124) and a reactive antenna circuit (118). The antenna structure components conductively disconnect the reactive circuit (118) from the RF drive (138) when the retractable element (124) is extended, and conductively reconnect them when the retractable element (124) is retracted. The retractable element (124) is also conductively connected to the RF drive (138) when the retractable element (124) is extended and conductively disconnected when the retractable element (124) is retracted. The reactive circuit (118) maintains substantially similar impedance to the retractable element (124) for an RF antenna circuit when the retractable antenna (142) is in both the extended and the retracted positions.

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